

## **MONTHLY PROGRESS REPORT**

### **ORONOGO-DUENWEG MINING BELT SITE - PHASE 10 JASPER COUNTY, MO**

**CONTRACT NO: EP-S7-15-06**

*Prepared for*

U.S. Environmental Protection Agency – Region 7  
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*Prepared by*



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EQM PN: 030319.0001

**Report No. 59**  
**Reporting Period: 1 September – 30 September, 2020**

6 October 2020

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## **1.0 INTRODUCTION**

EQM Inc. (EQM), under Contract No. EP-S7-15-06, with the United States Environmental Protection Agency (USEPA) prepares this Monthly Progress Report (MPR) to summarize work completed by EQM under Operable Unit 1 of the Oronogo-Duenweg Mining Belt Site - Phase 10 in Jasper County, MO.

EQM was contracted by USEPA to perform the general requirements, erosion control, clearing and grubbing, material removal, seeding and fertilizing on the Phase 10 sites.

This report is organized into sections that present the project schedule and summarize the work activities performed during the reporting period, problems encountered, proposed solutions, corrective actions taken, outstanding issues, changes to organization or method of operation, project costs, submittals, and work planned for the next reporting period.

## 2.0 PROJECT SCHEDULE STATUS

Area	Clearing & Grubbing	Waste Removal	Clay Cap	Drainage	Topsoil	Final Grading	Seeding	Fencing	Original LOD (Ac)	Final LOD (Ac)
Base Area 1	100%	100%	100%	100%	n/a	100%	100%	100%	38.6	38.8
Base Area 2	100%	100%	100%	100%	n/a	100%	100%	100%	5.6	5.2
Base Area 3	100%	100%	100%	100%	n/a	100%	100%	100%	7.9	4.7
Base Area 4	100%	100%	100%	100%	n/a	100%	100%	100%	9.1	8.8
Base Area 6	100%	100%	100%	100%	n/a	100%	100%	n/a	14.5	12.1
Base Area 8	100%	100%	100%	100%	n/a	100%	100%	100%	27.7	22.9
Base Area 11	100%	100%	n/a	100%	100%	100%	100%	100%	6	4.6
Base Area 13	100%	100%	100%	100%	n/a	100%	100%	100%	13.2	9.3
Base Area 14	100%	100%	100%	100%	n/a	100%	100%	n/a	3.9	3.1
Base Area 15	100%	100%	100%	100%	n/a	100%	100%	100%	30.8	11.8
Cen. City Frwrks. Repos.	100%	n/a	100%	100%	100%	100%	100%	n/a	0	1.9
Opt. 1 Area 1	100%	100%	100%	100%	n/a	100%	100%	100%	35.4	30.1
Opt. 1 Area 2	100%	100%	100%	100%	n/a	100%	100%	100%	19	14.7
Opt. 1 Area 3	100%	100%	100%	100%	n/a	100%	100%	100%	21.4	19
Opt. 1 Area 6	100%	100%	100%	100%	100%	100%	100%	100%	14.7	15.2
Opt. 1 Area 9	100%	100%	100%	100%	n/a	100%	100%	100%	4.6	5.2
Opt. 1 Area 15	100%	100%	100%	100%	n/a	100%	100%	n/a	1.9	2
Opt. 1 Area 20	100%	100%	100%	100%	n/a	100%	100%	n/a	3.6	7.8
Balestrin Repository	100%	n/a	100%	100%	100%	100%	100%	n/a	0	3.1
Opt. 2 Area 1	100%	100%	100%	100%	n/a	100%	0%	0%	61.64	42.83
Opt. 2 Area 3	100%	100%	100%	100%	n/a	100%	100%	100%	17.8	29.4

Area	Clearing & Grubbing	Waste Removal	Clay Cap	Drainage	Topsoil	Final Grading	Seeding	Fencing	Original LOD (Ac)	Final LOD (Ac)
Opt. 2 Area 5	100%	100%	100%	100%	n/a	100%	100%	n/a	8.4	7
Opt. 2 Area 6 - South	100%	100%	100%	100%	n/a	100%	100%	100%	146.9	94.1
Opt. 2 Area 6 - North	100%	100%	100%	80%	n/a	70%	0%	0%	146.9	16.7
Opt. 2 Area 6 - West	100%	100%	100%	100%	n/a	100%	100%	100%	25.4	
Opt. 2 Area 7	100%	100%	100%	100%	n/a	100%	100%	100%		24.3
Opt. 2 Area 8	100%	100%	100%	100%	100%	100%	100%	100%	12.8	36.7
Opt. 2 Area 9	100%	100%	n/a	100%	100%	100%	100%	n/a	n/a	2.4
Gypstack Modification	100% complete								N/A	
MW-09	100%	100%	100%	100%	100%	100%	100%	100%	90.2	34.15
MW-14-01_02	100%	100%	100%	100%	n/a	100%	100%	100%	44.61	26.99
MW-18-01	100%	100%	100%	100%	100%	100%	100%	100%	56.96	39.93
MW-19-01_02	100%	100%	100%	100%	100%	100%	100%	n/a	23.04	
MW-19-03	100%	100%	100%	100%	n/a	100%	100%	0%	2	9.48
Snowball Repository	100%	100%	100%	100%	70%	25%	0%	0%		
MW-26-01	100%	100%	100%	100%	n/a	100%	100%	100%	37.1	27.67
MW-26-04	100%	100%	100%	100%	n/a	100%	100%	100%	2.14	2.1
MW-26-05	100%	100%	100%	100%	100%	100%	100%	100%	8.97	10.39
CC Christian Church	100%	100%	100%	100%	100%	100%	100%	100%	N/A	

3.0 SUMMARY OF WORK ACTIVITIES PERFORMED THIS PERIOD

Mine Waste Remediation – Phase 10 (Option 2)								Monthly Totals																	
CLIN	Description	Quantity	Unit	Quantity to Date	Percent Complete	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan, 2018	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
2001	Erosion Control																								
2001AA	Sediment Fence	570	LF	570.0	100.0%						330.00							240							
2001AB	Rip Rap	915	Ton	915.0	100.0%			105.16	189.18	87.55	132.89							28.72	371.48						
2001AD	Stabilized Construction Entrance	6	Ea	6.0	100.0%		1.00	2.00			2.00				1										
2002	Clearing and Grubbing	160	Acre	116.3	72.5%							12.38			103.88									44.04	
2003	Earthwork																								
2003AA	Excavation/Disposal of Contaminated Waste	982,381	CY	982,379.0	100.0%																				
						43,533	51,692	102,023	96,506	86,979	92,806	99,045	82,753	62,577	48,231	83,855	80,185	32,787	19,407						
2003AB	Placement of material for Drainage	96,721	CY	96,474.0	99.7%		1,952	11,637	4,672	3,447		1,992	5,778	8,864		42,914	400	6,736	7,792		290	247			
2003AC	Grade Excavated Areas to final grade	160	Acre	116.3	72.5%							12.38			103.88									44.04	
2003AD	Import/Place Clay for all Repository Caps	48,810	CY	48,810.0	100.0%							1,898	8,102	20,438			3,408	5,812	8,604	548					
2003AE	Import/Place Topsoil for all Repository Caps	5,000	CY	5,000.0	100.0%														4,482	518					
2004	Seeding/Fertilizing																								
2004AA	Seeding/Fertilizing Repositories	1	Acre	1.3	98.5%				1.28																
2004AB	Seeding/Fertilizing (Fescue)	92	Acre	92.1	100.0%			13.81	2.39						75.9										
2005	Remove/Replace Fencing	5,370	LF	0.0	0.0%																			5370	
2006	Supply/Install 24" CMP Pipe	164	lf	164.0	100.0%							60.00			60				44						
2007	Supply/Install 36" CMP Pipe	55	lf	55.0	100.0%														55						

Mine Waste Remediation – Phase 10 (Option 3)																												
CLIN	Description	Quantity	Unit	Quantity to Date	Percent Completed	Apr 2018	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan, 2019	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov			
3001	Erosion Control																											
3001 AA	Sediment Fence	6,000	LF	2,150	36%	465							740	945		0	0	0	0	0								
3001 AB	Rip Rap	2,500	Ton	2,461	98%	71		15				1,527	63					157	15	33		161	391	28	0			
3001 AC	Stabilized Construction Entrance	6	Ea	4	67%	1	1		1		1									0								
3002	Clearing and Grubbing	300	Acre	239	80%						26			77						56				79	0			
3003	Earthwork																											
3003 AA	Excavation/Disposal of Contaminated Waste	792,184	CY	794,100	100%	8,997	49,050	79,812	68,922	57,501	92,911	64,500	72,648	159,384	29,538	29,970	30,539	33,921	16,407	0								
3003 AB	Placement of material for Drainage	100,000	CY	131,700	132%				4,352		33,549	22,715		38,379	384	5,563	13,969	2,659	0	10,130								
3003 AC	Grade Excavated Areas to final grade	300	Acre	239	80%						26			77						56				79	0			
3003 AD	Import/Place Clay for all Repository Caps	26,000	CY	41,143	158%		1,156		4,894		504	4,032	4,368		11,100	4,974	8,914	1,201	0	0								
3003 AE	Import/Place Topsoil for all Repository Caps	15,000	CY	8,067	54%		1,324				2,734		1,686	2,323														
3004	Seeding/Fertilizing																											
3004 AA	Seeding/Fertilizing Repositories	10	Acre	0	0%																							
3004 AB	Seeding/Fertilizing (Fescue)	290	Acre	166	57%			166																				
3005	Remove/Replace Fencing	10,000	LF	10,021	100%			1,070	3,485	1,505	31		2,815	1,115														
Mine Waste Remediation – Phase 10 (Option 3)																												

CLIN	Description	Quantity	Unit	Quantity to Date	Percent Completed	Apr 2018	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan, 2019	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov
3007	Supply/Install 36" CMP Pipe	100	lf	5	5%	5																			
3010	Rip Rap, 12"-36"	2,200	Ton	681	31%	112	88							481											
3011	Crushed Rock, 3" Clean	600	Ton	570	95%	87	27	28	56				83	196	81	0		13	0	0			0	0	0
3012	Gravel, 1"-3" Crushed w/fines	1,400	Ton	5,407	386%	200								788	14	0		2,577	1,278	43		117	122	129	139
3013	Powerline Relocation	1	LS	1	100%							1													
3014	Tire Disposal	40	Ton	45	112%					13				31											
3015	Powerline Relocation at Carl Junction	1	LS	1	100%																1				
3016	Demolition/Debris Disposal of R. Porter's Prop	1	LS	1	100%																1	0	0	0	0



Mine Waste Remediation – Phase 10 (Option 4)																							
CLIN	Description	Quantity	Unit	Quantity to Date	Percent Completed	Apr, 2019	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan, 2020	Feb	Mar	Apr	May	June	July	Aug	Sept
4001	Erosion Control																						
4001AA	Sediment Fence	5,000.00	LF	2,716.0	54.3%				2,716														
4001AB	Rip Rap	2,300.00	Ton	27.6	1.2%																	27.59	-
4001AC	Stabilized Construction Entrance	4.00	Ea	4.0	100.0%	1		1		1	1												
4002	Clearing and Grubbing	200.00	Acre	23.5	11.7%											23							
4003	Earthwork																						
4003AA	Excavation/Disposal of Contaminated Waste	500,000.00	CY	553,842.0	110.8%			44,430	62,019	54,783	80,298	114,608	21,510	8,667	35,711	16,892	20,061	46,597	-	10,530	7,703	29,952	81
4003AB	Placement of material for Drainage	100,000.00	CY	125,330.0	125.3%			36,365	360	2,748	2,958	17,200	264	3,871	-	6,374	2,535	2,340	-	128	45,515	3,412	1,260
4003AC	Grade Excavated Areas to final grade	300.00	Acre	23.5	7.8%											9				14	-	-	-
4003AD	Import/Place Clay for all Repository Caps	120,000.00	CY	129,511.0	107.9%	4,839		619	3,682	6,146	7,573	5,400	6,882	20,760	1,072	3,611	1,344	-	-	-	23,907	21,790	21,886
4003AE	Import/Place Topsoil for all Repository Caps	60,000.00	CY	40,393.0	67.3%					36		2,271	-	1,884	356	356				96.00	64.00	7,692.00	27,638
3004	Seeding/Fertilizing																						
4004AA	Seeding/Fertilizing Repositories	70.00	Acre	3.6	5.1%														3.59	-	-	-	-
4004AB	Seeding/Fertilizing (Fescue)	200.00	Acre	274.6	137.3%				46				122		-	-			91.37	16.20	-	-	-
4005	Remove/Replace Fencing	15,564.00	LF	17,833.0	114.6%				3,476			3,469	1,948		3,132	-		3,450.00	-	-	-	-	2,358
4006	Supply/Install 24" CMP Pipe	200.00	If	40.0	20.0%						40												
4007	Supply/Install 36" CMP Pipe	100.00	If	420.0	420.0%																		420.00
4010	Rip Rap, 12"-36"	5,720.00	ton	2,440.7	42.7%	680	475	85			123	138	14		257	191		249.24	-	-	29.93	99.29	100.49
4011	Crushed Rock, 3" Clean	200.00	ton	1,620.6	810.3%	112	296	32		418	168					160							435.12
4012	Gravel, 1-3" Crushed w/fines	945.00	ton	1,831.0	193.8%										178	-				57.90	152.42	1,442.87	-
4013	Tire Disposal	40.00	ton	2.6	6.6%																2.62	-	-
4014	Phone Line Relocation	1.00	EA	1.0	100.0%														0.50	0.50	-	-	-
4015	Haul & Place Wood Chips for Revegetation	1.00	EA	0.0	0.0%														-	-	-	-	-
4016	Gypstack Repairs	1.00	EA	1.0	100.0%						0.06	0.15	0.25	0.25	0.04	0.25			-	-	-	-	-
4017	Power Line Relocation, Area 2-6 Dogwood LN	1.00	EA	1.0	100.0%														0.50	0.50	-	-	-
4018	Box Culvert at Dogwood Lane	1.00	EA	1.0	100.0%														-	-	0.50	0.40	0.10

#### **4.0 PROBLEMS ENCOUNTERED / RFI's SUBMITTED**

- No RFIs were submitted this reporting period. See RFI Log Attachment A
- EQM, Inc. developed Health & Safety Amendment & AHA specific to procedures mitigating the threat posed by the Coronavirus. EQM has implemented these procedures into everyday operations and will continue to do so for the foreseeable future.

#### **5.0 PROPOSED SOLUTIONS**

- Nothing at this time.

#### **6.0 CORRECTIVE ACTIONS**

- Nothing at this time.

#### **7.0 OUTSTANDING ISSUES**

- EQM's request for a contract modification for the differing site conditions, regarding additional aggregates and fencing CLINs, dated 23 July, 2020, resulted in issuance of contract modification P00045, issued Sept 29, 2002 for \$197,054.12.
- USEPA issued contract modification P00046 on September 30, 2020 extending the PoP to Nov 15, 2020 from October 2, 2020 pursuant to a request from EQM.
- EQM submitted a proposed capacity swap for the residual funds from Option Period 3 into Option Period 4. USEPA will be addressing in the next couple of weeks.

#### **8.0 CHANGES TO ORGANIZATION OR METHOD OF OPERATION**

- None.

#### **9.0 MEETINGS AND CALLS**

- EQM and USEPA corresponded via e-mail and telephone conversations regarding the contract.

#### **10.0 SUBMITTALS**

- A review of current planning documents identified a need for revision/updates. EQM submitted a final revision of the SAP, which includes the FSP & QAPP, via e-mail on 22 Feb 2018 in PDF format. EQM received review comments from USEPA on 10 Oct 2018 for the FSP & QAPP and submitted a revised document to USEPA on 15 Jan 2019. On Feb 4, 2019, EQM provided USEPA with a revised signature page including a signature block for the COR, Steve Kemp.

## 11.0 PROJECT COSTS

The following project costs are estimated for this reporting period:

<b>Base Contract Value</b>	\$3,685,978.44		
Prior Period Cumulative Costs	\$3,685,978.44	Prior Period Cumulative % Complete	100%
Current Period Costs	\$0.00	Current Period % Complete+	0.0%
Current Cumulative Costs	\$3,685,978.44	Current Cumulative % Complete	100%

<b>Option 1 Contract Value</b>	\$5,977,289.12		
Prior Period Cumulative Costs	\$5,973,773.30	Prior Period Cumulative % Complete	99.9
Current Period Costs	\$0.00	Current Period % Complete	0%
Current Cumulative Costs	\$5,973,773.30	Current Cumulative % Complete	99.9%

<b>Option 2 Contract Value</b>	\$7,767,990.34		
Prior Period Cumulative Costs	\$7,720,026.80	Prior Period Cumulative % Complete	99.4%
Current Period Costs	\$0.00	Current Period % Complete	0.0%
Current Cumulative Costs	\$7,767,990.34	Current Cumulative % Complete	100%

<b>Option 3 Contract Value</b>	\$7,256,990.37	w/ incentives	
Prior Period Cumulative Costs	\$7,087,895.55	Prior Period Cumulative % Complete	97.7%
Current Period Costs	\$0.0	Current Period % Complete	0.0%
Current Cumulative Costs	\$7,087,895.55	Current Cumulative % Complete	97.7%

<b>Option 4 Contract Value</b>	\$9,376,554.32	w/o incentives	
Prior Period Cumulative Costs	\$8,240,486.23	Prior Period Cumulative % Complete	87.5%
Current Period Costs	\$996,092.55	Current Period % Complete	11%
Current Cumulative Costs	\$9,236,578.80	Current Cumulative % Complete	98.5%

## 12.0 WEATHER

EQM experienced delays associated with several rain-outs, wet field conditions and/or community events:

### **Week 1: 9-1 to 9-6**

Tuesday 1<sup>st</sup> – Shutdown (Rain)

### **Week 2: 9-7 to 9-13**

Monday 7<sup>th</sup> – No Work (Labor Day)

Thursday 10<sup>th</sup> – Shutdown (Rain in am)

### **Week 3: 9-14 to 9-20**

No adverse weather or events

### **Week 4: 9-21 to 9-27**

Tuesday 22<sup>nd</sup> – Partial work, No On-roads (Rain)

Wednesday 23<sup>rd</sup> – Partial work, No On-roads (Rain)

### **Week 5: 9-28 to 9-30**

Monday 28<sup>th</sup> – Partial work, No On-roads (Rain)

## 13.0 30-DAY LOOK AHEAD

Work scheduled for October includes the following:

- Replace ~2000' fence at Snowball Repository
- Continue placing topsoil at Snowball Repository
- Continue progressing through Punch list items
- Continue work for proper drainage in Area 2-6 North Powerline
- Finish McDonald Detention
- Begin seeding areas that are ready
- Perform inspection & maintenance activities

**ATTACHMENT A**  
**REQUEST FOR INFORMATION (RFI) REGISTRY**

**ORONOGO-DUENWEG MINING BELT SITE – Phase 10  
REQUEST FOR INFORMATION REGISTRY**

<b>RFI #</b>	<b>Item Description</b>	<b>Date Sub Submitted To EQM</b>	<b>Date EQM Submitted To USEPA CO</b>	<b>Date CO Returned Response To EQM</b>	<b>Action Taken</b>

**ATTACHMENT B**  
**SUBMITTAL REGISTRY**

**ORONOGO-DUENWEG MINING BELT SITE Phase 10  
SUBMITTAL REGISTRY**

<b>Section Number</b>	<b>Section Title</b>	<b>Submittal #</b>	<b>Item Type</b>	<b>Date Sub Submitted To EQM</b>	<b>Date EQM Submitted To USEPA CO</b>	<b>Date CO Return Submittal To EQM</b>	<b>Approved/ Disapproved</b>
5	Deliverables	1	Sampling and Analysis Plan	NA	11/18/15	11/2015	Approved via email
			Sampling and Analysis Plan, Rev 1	NA	2/22/18	10/10/18	Pending; see section 10
5	Deliverables	2	Chemical Quality Control Plan	NA	11/18/15	11/2015	Approved via email
5	Deliverables	3	Quality Assurance Project Plan	NA	11/18/15	11/2015	Approved via email
			Quality Assurance Project Plan, Rev 1	NA	1/15/19		Pending
5	Deliverables	4	Project Management Plan	NA	11/18/15	11/2015	Approved via email
5	Deliverables	5	Health and Safety Plan	NA	11/18/15	11/2015	Approved via email
5	Deliverables	5 - Amended	Health and Safety Plan, Amended, Mar 2020	NA	3/25/20		Pending



**ATTACHMENT C**  
**SITE FIGURES**











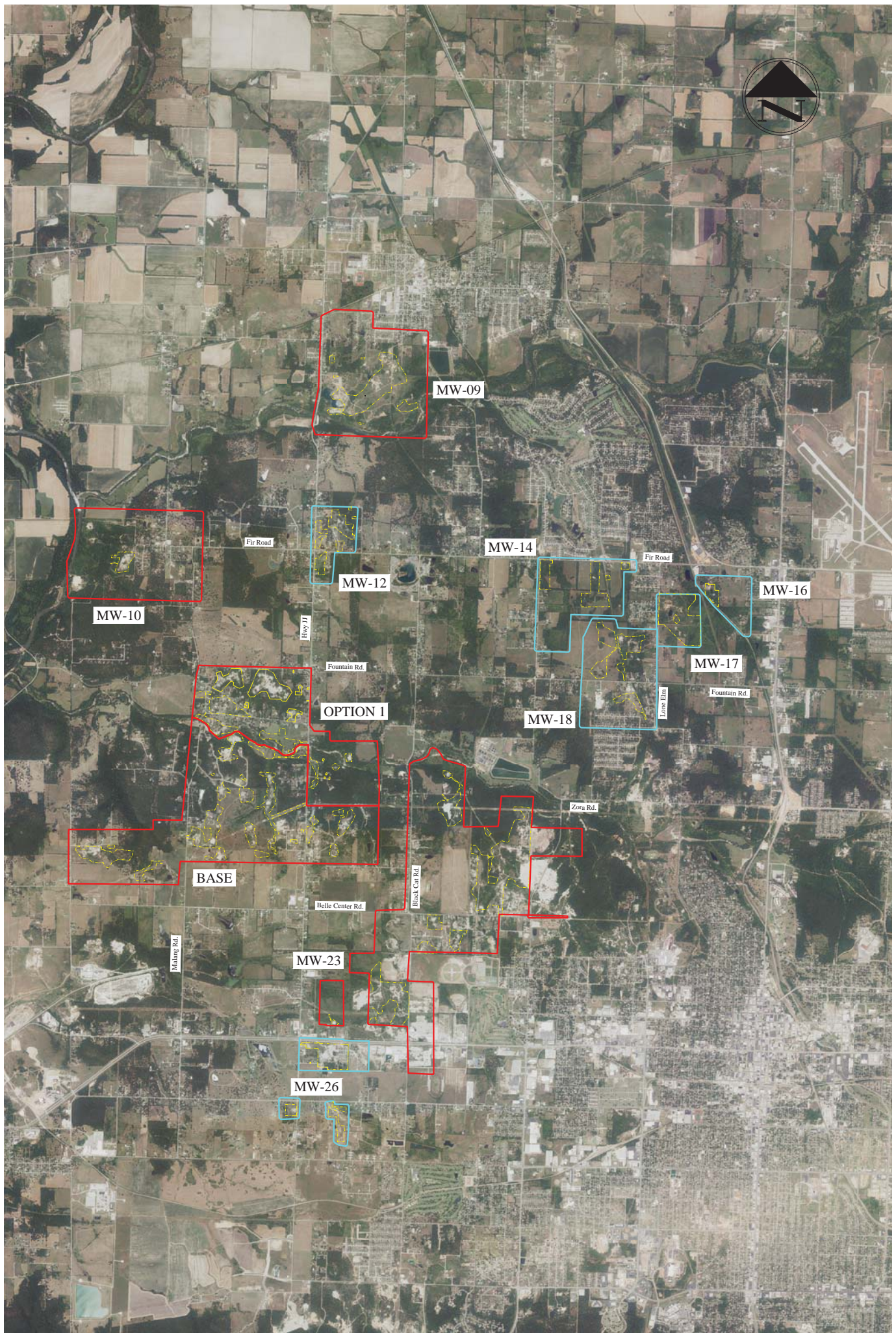


2-8













MW-12







MW-26

MW-26

MW-26







MW-14

MW-16

MW-17

MW-18





**ATTACHMENT D**  
**PHOTOGRAPHS**



**Figure 1 – View looking north at MW 2-6 Powerline**





**Figure 2 – Installing culverts at MW 2-6 North**



**Figure 3 – Aerial view of topsoil placement on Snowball Repository**